SAEE VIDYANIKETHAN ENGINEERING COLLEGE (Autonomous) NIKETHAN Sree Sainath Nagar, Tirupati – 517 102, AP.

# DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

# Agenda for 7<sup>th</sup> Meeting of Board of Studies for PG Program M.Tech. (Electrical Power Systems)

#### on

## 23<sup>rd</sup> April, 2016

- 1. Action taken report on minutes/resolutions of 6<sup>th</sup> BOS meeting.
- 2. Academic Calendar for M. Tech Program in Electrical Power Systems.
- Vision and Mission of the Department, Program Educational Objectives, Program Outcomes and Program Specific Outcomes of M.Tech. Electrical Power Systems.
- 4. Course structure, Course Objectives & Course Outcomes of M.Tech.(EPS)
- 5. M.Tech. Electrical Power Systems course Syllabi and model question papers
- 6. Panel of paper setters and sample question bank
- 7. Extension of Academic Period to a M. Tech. Student under SVEC10 regulations.
- 8. Teaching, Learning and Evaluation Practices.
- 9. Research activities.
- 10. Faculty and Staff development activities.
- 11. Student development activities.
- 12. Student support systems.
- 13 Extension activities.
- 4 Any other item.

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**Department of Electrical & Electronics Engineering** 

Meeting of Board of Studies Electrical and Electronics Engineering

on 27<sup>th</sup> April, 2016

#### **Minutes:**

#### **Members Present:**

S. No.	Name	Role
1	Dr. T.Devaraju Professor, Head, Dept. of EEE, SVEC	Chairman
2	Dr. M. Vijaya Kumar Professor, Dept. of EEE,JNTUA, Anantapur	JNTUA Nominee (Academics)
3	Dr. D.V.S.S. Siva Sarma Professor, Dept. of EEE, NIT, Warangal	External Member (Academics)
4	Dr. M. Damodara Reddy Professor, Dept. of EEE, SVUCE, Tirupati	External Member (Academics)
5	Mr. M. Krishnamurthy Naidu General Manger, Amararaja Power Systems Division, Karakambadi, Tirupati	External Member (Industry)
6	Mr. K. Ramanujulu R&D Engineer, QUADIO Devices, Pune	Alumni (Industry)
7	Dr. T. Nageswara Prasad Professor, Head, Dept. of EEE, SVEC	Internal Member
8	Dr. P. Umapathi Reddy Professor, Dept. of EEE, SVEC	Internal Member
9	<b>Dr. Nagaraju Mandadi</b> Professor, Dept. of EEE, SVEC	Internal Member
10	Dr. M.S. Sujatha Professor, Dept. of EEE, SVEC	Internal Member
11	Dr. N.M.G. Kumar Professor, Dept. of EEE, SVEC	Internal Member
12	Dr. S. Farook Associate Professor, Dept. of EEE, SVEC	Internal Member
13	Mr. M. Manohara Associate Professor, Dept. of EEE, SVEC	Internal Member
14	Mr. S. Hema Chandra Professor, Dept. of EEE, SVEC	Internal Member

#### Minutes:

#### Action Taken Report (ATR)on resolutions of BOS meeting held on 19th April, 2015.

The Chairman Dr. T. Devaraju Presented the Action taken report on the resolutions of BOS meeting held on 19<sup>th</sup> April 2015.

## Report on implementation of autonomy for M.Tech. Programme

SVEC 14 Regulations were implemented and one batch of Students completed.

### 3. Approval of Academic calendar for M.Tech. course(EPS)

Academic calendar for M.Tech Programme was presented and approved.

### 4. M.Tech.(EPS) Course structure & Vision & Mission of the Department

Chairman appraised the members, the Vision and Mission of the Department. Course structure, PEO, PO & PSO of the M.Tech (EPS) programme for approval.

The members have approved the PEO, PO, PSO and of M.Tech (EPS). Course structure, of the M.Tech. (EPS)

#### 5. M.Tech.(EPS) Syllabi and Model question papers for Course

The Chairman has presented detailed syllabi for M.Tech. (EPS) which was presented latest for SVEC 16 regulations. After deliberate discussions, the members have suggested some changes to course contents in the subjects/courses link Power electronic converters, HVDC, FACTS, and intelligent control.

The suggestions are forwarded to the module coordinators for incorporation in the print version.

#### 6. Panel of question paper setters and question Bank.

The BOS is authorized to prepare the panel of question paper setters and submit as and when required. They perused the question bank of each course and suggested that care should be taken to avoid over lapping of questions on the same topic in the end examination question paper.

#### 7. Extension of academic period to a M.Tech student under SVEC10 regulations

While noting the issue on non-completion of project work by Undeti Shanthivardhan bearing roll number 11121D0716, a student of M.Tech. Electrical Power Systems, the members resolved to extend the period for completion of the degree by 2016-17 as special case on medical grounds, subject to the approval of the academic council of the college.

#### 8. Department activities in the Department.

Perused the information provided under the following heads.

- (i) Teaching, Learning and Evaluation practices. (ii) Research activities.
- (iii) Faculty development activities
- (iv) Student development activities
- (v) Student support systems
- (vi) Extension activities.

#### Perused and appreciated

#### 9. Any other item

- a) Incorporate Voltage source inverters in FACTS, even in through redundant for continuity.
- b) Encourage the students to do good research- oriented projects and the papers in the peer reviewed journals.
- c) Involve M.Tech. students who were admitted through GATE for conduction of tutorial classes and assist in the laboratories.
- d) Arrange Expert lectures on the advanced topics like

Restructuring of power systems,

**Distributed Generation** 

Smart Grid, FACT Controller and Integration of Renewable energy sources.

The external Members of the BOS, appreciated the healthy and emulatable practices for the holistic development of the department and in achieving NBA accredited for two years under TIER-I M.Tech. (EPS) Programme. The members appreciated the pro-active approach of the college management and efforts taken by department.

S. No.	Name	Role	Signatures
1	Dr. T.Devaraju Professor, Head, Dept. of EEE, SVEC	Chairman	Dwar
2	Dr. M. Vijaya Kumar Professor, Dept. of EEE, JNTUA, Anantapur	JNTUA Nominee (Academics) External Member	-
3	Dr. D.V.S.S. Siva Sarma Professor, Dept. of EEE, NIT, Warangal	(Academics)	Durta Em
4	Dr. M. Damodara Reddy Professor, Dept. of EEE, SVUCE, Tirupati	External Member (Academics)	Medely
5	Mr. M. Krishnamurthy Naidu General Manger, Amararaja Power Systems Division, Karakambadi, Tirupati	External Member (Industry)	-
6	Mr. K. Ramanujulu R&D Engineer, QUADIO Devices, Pune	Alumni (Industry)	K. Ruite
7	Dr. T. Nageswara Prasad Professor, Head, Dept. of EEE, SVEC	Internal Member	TINIP
8	Dr. P. Umapathi Reddy Professor, Dept. of EEE, SVEC	Internal Member	thally
9	Dr. Nagaraju Mandadi Professor, Dept. of EEE, SVEC	Internal Member	(mus)
10	Dr. M.S. Sujatha Professor, Dept. of EEE, SVEC	Internal Member	H.S. sy thu
11	Dr. N.M.G. Kumar Professor, Dept. of EEE, SVEC	Internal Member	NON
12	Dr. S. Farook Associate Professor, Dept. of EEE, SVEC	Internal Member	Friend
13	Mr. M. Manohara Associate Professor, Dept. of EEE, SVEC	Internal Member	and the
14	Mr. S. Hema Chandra Professor, Dept. of EEE, SVEC	Internal Member	Ste

The meeting concluded with thanks to the external members for valuable suggestions.



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### **Department of Electrical and Electronics Engineering**

## Approved Course Structure

### **Program: M.Tech. – Electrical Power Systems**

### **Regulations: SVEC – 16**

#### I-Semester

s.		e Course Title	Con		Period /eek	s per	Cre dit s	Scheme of Examination Max. Marks		
No.	Course Code		L	т	Р	Tota I		Interna I Marks	Extern al Marks	Total Marks
1.	16MT10701	Advanced Control Systems	4	-	-	4	4	40	60	100
2.	16MT10702	High Voltage Engineering	4	-	-	4	4	40	60	100
3.	16MT10703	Power Electronic Converters	4	-	-	4	4	40	60	100
4.	16MT10704	Power System Security and State Estimation	4	-	-	4	4	40	60	100
5.	16MT10705	Reactive Power Compensation and Management	4	-	-	4	4	40	60	100
	Professiona	l Elective-1								
	16MT10706	EHVAC Transmission								
6.	16MT10707	Microcontrollers and Applications	4	-	-	4	4	40	60	100
	16MT10708	Power System Reliability								
	16MT10709	Solar and Wind Energy Conversion Systems								
7.	16MT10731	High Voltage Engineering Lab	-	-	4	4	2	50	50	100
8.	16MT10732	Power Systems Simulation-I lab	-	-	4	4	2	50	50	100
		Total	24	-	8	32	28	340	460	800
9.	16MT13808	Research Methodology (Audit course)	-	2	-	2	-	-	-	-



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### **Department of Electrical and Electronics Engineering**

s.			Con	tact P We	eriod eek	s per	Cred	Scheme of Examination Max. Marks		
No.	Course Code	Course Title	L	т	Р	Tota I	its	Interna I Marks	Extern al Marks	Total Marks
1.	16MT20701	Flexible AC Transmission System	4	-	-	4	4	40	60	100
2.	16MT20702	Intelligent Systems	4	-	-	4	4	40	60	100
3.	16MT20703	Power System Stability and Control	4	-	-	4	4	40	60	100
4.	16MT20704	Restructured Power System	4	-	-	4	4	40	60	100
5.	16MT20705	Static and Digital Protection of Power System	4	-	-	4	4	40	60	100
6.	Professiona	Elective-2								
	16MT20706	Energy Auditing, Conservation and Management								
	16MT20707	High Voltage DC Transmission	4	-	-	4	4	40	60	100
	16MT20708	Power Quality								
	16MT20709	Smart Grid Technology	]							
7.	16MT20731	Power Systems and Relays Lab	-	-	4	4	2	50	50	100
8.	16MT20732	Power Systems Simulation-II lab	-	-	4	4	2	50	50	100
9.	16MT20733	Seminar	-	-	-	-	2		100	100
		Total:	24	-	8	32	30	340	560	900
10.	16MT23810	Intellectual Property Rights (Audit Course)	-	2	-	2	-	-	-	-

#### **II-Semester**



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### **Department of Electrical and Electronics Engineering**

#### III-Semester

s.	Course	Course Course Title			Period /eek	s per	Credits	Scheme of Examination Max. Marks		
No.	Code	Course Inte	L	т	P*	Total	Credits	Internal Marks	External Marks	Total Marks
1.	16МТЗМООС	Massive Open Online Course (MOOC)	-	-	-	-	-	-	-	-
2.	16MT30731	Project Work - Phase I	-	-	-	-	8	50	50	100
Total:		-	1	-	-	8	50	50	100	

\*Fulltime Project Work

#### IV-Semester

s.	S. Course Course Title		Contact Periods per Week				Credite	Scheme of Examination Max. Marks		
No.	Code	Course Intie	L	т	<b>P</b> *	Total	Credits	Internal Marks	External Marks	Total Marks
1.	16MT40731	Project Work – Phase II	-	-	-	-	20	150	150	300
	т	otal:	-	-	-	-	20	150	150	300
	Grand Total:						86	880	1220	2100

\*Fulltime Project Work

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Chairman, BOS-EEE



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#### **Department of Electrical and Electronics Engineering**

LIST OF NEW COURSES INTRODUCED

#### **Program: M.Tech.- Electrical Power Systems**

#### **Regulations: SVEC - 16**

16MT10702	High Voltage Engineering
16MT10706	EHVAC Transmission
16MT10731	High Voltage Engineering Lab
16MT18306	Intelligent Controllers
16MT13808	Research Methodology
16MT20732	Power Systems Simulation-II lab
16MT23810	Intellectual Property Rights

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Chairman, BOS-EEE